

## **REMARKS**

This amendment is responsive to the Office Action dated July 31, 2003. Claims 1-67 remain pending in the Application. Claims 1-27, 29-41, 43-47 and 49-67 stand rejected by the Examiner. Claims 28, 42 and 48 are objected to. Claims 1, 31, 45, and 46 have been amended herein. Applicants traverse the rejections of claims 1-27, 29-41, 43-47 and 49-67.

### ***Allowable Subject Matter***

Applicants sincerely thank the Examiner for indicating that claims 28, 42 and 48 would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. In view of the arguments and amendments made herein, Applicants believe that all of the pending claims are in condition for allowance without rewriting claims 28, 42 and 48.

### ***Claim Rejections - 35 U.S.C. § 103***

Claim 1 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,692,107 to Simoudis et al. ("Simoudis") in view of U.S. Patent No. 5,832,450 to Myers et al. ("Myers"). This rejection is traversed.

Claim 1 recites in combination with its other limitations that a "model repository includes one or more index structures containing a plurality of attributes associated with the data models." Claim 1 further recites that the "the data models are predictive data models." As an example, predictive data models can include but are not limited to decision tree algorithms. A predictive data model that results from a decision tree

analysis identifies the variables that enable groups to be identified within the data. The records/observations within a group exhibit similar behavior with respect to a target variable. As an illustration, in a sales analysis, the target variable in the predictive data model might be the one that contains the total amount of the sale. The variables that define the groups in the decision tree analysis are termed predictor variables. The predictor variables that are most important to the analysis are called the splitting variables. Attributes of the predictive decision tree data model may have its splitting variables indexed. (See generally, Applicants' specification, page 16 line 20 - page 17 line 3).

The Office Action maintains on page 26 that "it is Myers' 'complex medical objects' (Column 6, lines 25-29) that are data models, indexed by their attributes for storage and retrieval." However, Myers' complex medical records are not predictive data models as required by claim 1 in combination with claim 1's other limitations. Myers' medical objects store medical information regarding a particular patient. Patient medical information includes the patient's name, address, sex, social security number, and the like. "Importantly, each attribute descriptor, such as 'MRN:' [(i.e., medical record number)], 'Name:', and so on, is a text object which is immutably coupled to the associated value, such as '222222', 'Smith, Jane' and '222 Short Trail'. Thus, 'Name:Smith, Jane' forms a text object which includes both a descriptor and a value." (See Myers, 7:31-64).

These medical objects of Myers are storage containers to hold medical information captured about a patient. They are not predictive data models, such as a decision tree data model with splitting variables.

The Office Action on page 27 further maintains that “[e]ven if Myers’ objects were not ‘data models’, the mere teaching by Myers of indexing **any object** by its attributes within a computerized repository is enough to render the claim obvious over Simoudis, because Simoudis directly teaches the storing of data models by their attributes in the model repository.” (emphasis in the original). Applicants respectfully disagree. For example, Myers does not teach indexing “any object” as maintained in the Office Action. Rather, Myers is very limited in scope when it uses the term “any object”: “**Any object in the text database, which would include words, groups of words, sentences and paragraphs**, may be treated as objects. Text input into the database may be parsed in relation to a desired dictionary.” (See Myers, 6:37-40; emphasis added). Thus, the term can only reasonably include textual information (i.e., words, sentences) and not a predictive data model such as a decision tree that contains splitting variables. Accordingly, Simoudis even in combination with Myers cannot render claim 1 obvious, and claim 1 is allowable. With claim 1 being allowable, its dependent claims 2-30 are also allowable.

With reference to independent claim 31, claim 31 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Simoudis in view of Myers and further in view of U.S. Patent No. 6,263,337 to Fayyad et al. (“Fayyad”). This rejection is traversed. Claim 31 recites in combination with its other limitations that the data models stored in the model repository are predictive data models. For the reasons discussed above, Simoudis even in combination with Myers and Fayyad does not render claim 21 obvious. Claim 31 and its dependent claims are therefore allowable.

With reference to independent claims 45 and 46, claims 45 and 46 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Simoudis in view of Myers. These rejections are traversed. Claims 45 and 46 recite in combination with their respective other limitations a searchable index for attributes of data models wherein the data models are predictive data models. As discussed above for claim 1, Simoudis even in combination with Myers does not teach, suggest or motivate the generation of an index for predictive data models in combination with the other respective limitations of claims 45 and 46. Accordingly, claims 45 and 46 and their respective dependent claims are also allowable.

Lastly, it is noted that Applicants respectfully disagree with other positions in the Office Action as mentioned in its previous response.

### CONCLUSION

For the foregoing reasons, Applicants respectfully submit that claims 1- 67 are allowable. Therefore, the Examiner is respectfully requested to enter this responsive amendment and to pass this case to issue.

Respectfully submitted,

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